

# ● PRINTER RUSH ●

(PTO ASSISTANCE)

Application : 10/663,600 Examiner : HOF SASS GAU : 2636

From : M. DONATO Location : IDC FMF FDC Date : 11/21/05

Tracking # : EPM 10/663,600 Week Date : 10/24/2005

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<input type="checkbox"/> 312		
<input checked="" type="checkbox"/> SPEC	<u>09/16/03</u>	

[RUSH] MESSAGE:

PAGE 20 OF SPECIFICATION HAS MISSING DOCUMENT  
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MJD

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Re: Appl. No. 10/663,600, Filed 09-06-2003

Attached is a copy of the Notice to File Corrected Application Papers and a copy of Page 20 of Appl. 10/663,600. The requested information has been supplied; the page is now corrected.

Thank you for your help.

Number of Pages: (including cover page)

4

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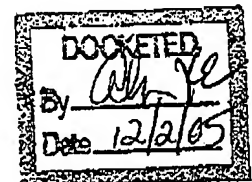
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,600	09/16/2003	Rodney M. Hornsby	038190/2-5096	3271
826	7590	11/30/2005		
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			ART 1 <sup>st</sup> PT	PAPER NUMBER
			2637	

DATE MAILED: 11/30/2005

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Serial Number  
10663600

Date Mailed  
11/30/05

**NOTICE TO FILE CORRECTED APPLICATION PAPERS*****Notice of Allowance Mailed***


This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

- Specification page 20, lines 28 and 31 serial numbers are missing.

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data. The digital data can be extracted from the processing element in any of a number of different known manners by another processing device, such as a personal computer, laptop computer or other high level processor. Thereafter, if desired, the digital data can be further analyzed to determine the location of the damage in the  
5 conductors.

In one embodiment, the digital data, as well as the reference digital data, can be presented on a display, such as by plotting each as a separate waveform. In this regard, FIG. 7 illustrates an example of digital data plotted against reference digital data for a conductor having a length of fifty feet terminated at a load. As shown, the  
10 reference digital data (left plot) is compared against the digital data (right plot) acquired in accordance with embodiments of the present invention. As shown, the digital data (right plot) differs substantially from the reference digital data (left plot). Thus, the display of FIG. 7 may illustrate a damaged conductor. Further, as shown at  
15 the bottom of the display of FIG. 7, the length of the conductor is determined to equal 12.55 feet, which differs substantially from the actual length of the conductor, fifty feet. In contrast, in instances in which the conductor is not damaged, the reference digital data (left plot) is typically substantially similar to the digital data (right plot).

In another embodiment of the present invention, shown in FIG. 8, the system can further include an arc fault detector 70 electrically connected between the  
20 programmable controller 10 and the loads 14. In this embodiment, the arc fault detector is capable of monitoring the current flow through the programmable controller for anomalies associated with an arc event. Then, when one or more such anomalies are identified by the arc fault detector, the arc fault detector can notify the programmable controller of the event so that the programmable controller can place  
25 respective switches 40 in the off mode to prevent the respective load from being damaged by an arc event. For more information on such an arc fault detector 70, as well as the system including both the damaged wire detector 16 and the arc fault detector, see U.S. Patent Application No. 10/662,565, entitled: *System and Method for Remotely Detecting Electric Arc Events in A Power System*, filed September 15, 2003;  
30 and U.S. Patent Application No. 10/663,584, entitled: *System and Method for Remotely Detecting and Locating Faults in A Power System*, filed concurrently herewith, the contents of both of which are hereby incorporated by reference in their entirety.